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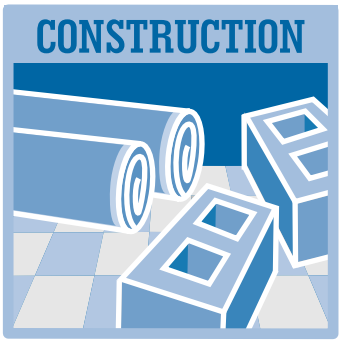
EPA

ECO PURCHASING

# 1997 Buy-Recycled Series Construction Products




Whether you're laying a foundation or choosing the right color of paint, get your project off the ground with quality recycled products! More and more construction project managers are learning what the U.S. Army and U.S. Navy already know—recycled building products are cost-effective, reliable, and easy to obtain, helping you finish your job on time and under budget.

To make it easier to buy recycled, the U.S. Environmental Protection Agency (EPA) updates the Comprehensive Procurement Guidelines (CPG) each year. Through the CPG, EPA designates items that must contain recycled content when purchased by federal, state, and local agencies or by government contractors using appropriated federal funds. Among these items, EPA has designated several construction products, ranging from carpet made from soda bottles to insulation made from yesterday's newspaper. EPA's research shows that the items designated in the CPG are of high quality, widely available, and cost-competitive with virgin products. EPA also issues a non-regulatory companion piece—the Recovered Materials Advisory Notice (RMAN)—that recommends levels of recycled content for these items.

From small jobs to major projects, recovered-content building materials are the way to go. Whether it's floors, walls, or bathroom stalls, you can make each job a success with recycled products!

**EcoPurchasing means considering attributes such as**

❖

**recycled content**
**toxicity**
**reusability**
**durability**
**repairability**

❖

**before you buy a product.**

Printed on paper that contains at least 20 percent postconsumer fiber.

# What Is The CPG?

**The CPG requires federal agencies to buy items made from recovered materials.**

Recycling is more than just dropping off your cans, bottles, and newspapers at the curb or at a local collection facility. Diverting recyclables from the waste stream is only the first step in the recycling process. The second step occurs when companies use these recyclables to manufacture new products. The third step comes when you purchase products made from recovered materials. That's how we close the loop.

To encourage the purchase of recycled products, the Resource Conservation and Recovery Act (RCRA) requires agencies to buy recycled products. In addition, President Clinton signed Executive Order 12873 in October 1993, which called for an increase in the federal government's use of recycled-content products. Developed in response to these directives, the CPG requires federal agencies to give preference to EPA-designated items made with recovered materials. This, in turn, supports recycling markets and allows recycling to continue to expand.

Issued in May 1995, the first CPG designated 19 new products and incorporated 5 previously designated items (including insulation and cement and concrete containing coal fly ash) in 7 product categories that procuring agencies are required to purchase with recycled content. (A procuring agency is any federal, state, or local agency or government contractor, that uses appropriated federal funds to purchase products.) A CPG update (CPG II) was published in November 1997, and designated an additional 12 items, including shower and restroom dividers/partitions and reprocessed and consolidated latex paint in specific applications.

If your agency spends more than $10,000 per year on a product designated in the CPG, you are required to purchase it with the highest recycled-content level practicable. The CPG also applies to lease contracts covering designated items.

By May 1, 1996, your agency was required to develop an affirmative procurement program (or modify its existing program) to incorporate buy-recycled requirements for construction board, thermal insulation, floor tiles, and carpeting products. It is not too late to develop your affirmative procurement program if you have not already done so. This effort might involve reviewing your specifications for these products and eliminating provisions that might pose barriers to procuring them with recycled content (such as aesthetic requirements unrelated to product performance). Your agency also must revise its affirmative procurement program to add the newly designated items—reprocessed and consolidated paint in specific applications and shower and restroom dividers/partitions—by November 13, 1998.

The CPG acknowledges, however, that specific circumstances might arise that preclude the purchase of products made with recovered materials. You may purchase designated items that do not contain recovered materials if you determine that: (1) the price of a given designated item made with recovered materials is unreasonably high, (2) there is inadequate competition (not enough sources of supply), (3) unusual and unreasonable delays would result from obtaining the item, or (4) it does not meet your agency's reasonable performance specifications.

## Key Terms

Before purchasing construction products containing recovered materials, you may need to review certain key terms.

- **Coal fly ash**: Coal fly ash is a by-product of coal burning at electric utility plants. It is called "fly" ash because it is transported from the combustion chamber by exhaust gases.
- **Ground granulated blast furnace (GGBF) slag**: Blast furnace slag is a by-product of iron blast furnaces. The slag is ground into granules finer than portland cement and can be used as an ingredient in concrete.
- **Rock wool**: This composition of fibers manufactured from slag or natural rock is used in building insulation.
- **Structural fiberboard**: This is a panel made from wood, cane, or paper fibers matted together and used for sheathing, structural, and insulating purposes.
- **Laminated paperboard**: These boards are made from one or more plies of kraft paper bonded together and are used for decorative, structural, or insulating purposes.
- **Reprocessed paint**: This is postconsumer latex paint that has been sorted by a variety of characteristics that are dictated by the recycler. In general, the paint is sorted by type (interior versus exterior), by light and dark colors, and by finish (high-gloss versus flat). The reprocessor adds raw materials to meet the performance and color requirements expected or required by the end user.
- **Consolidated paint**: This product consists of postconsumer latex paint with similar characteristics (such as type, color family, and finish) that is consolidated at the point of collection. The postconsumer paints are blended together and repackaged, usually with few or no new ingredients added to improve the performance of the resulting paint.

# How Do I Purchase Recycled-Content Construction Products?

To help agencies comply with the buy-recycled requirements, EPA also issues guidance in RMANs, which are designed to make it as easy as possible to buy the designated items. The RMANs recommend recycled-content levels to look for when purchasing construction products, as shown in the table to the right. Following the RMANs' recommended levels will help ensure that your affirmative procurement program and standards meet the buy-recycled requirements.

Rather than specifying just one level of recycled content, the RMANs recommend ranges that reflect actual market conditions. The recommendations are based on market research identifying recycled-content products that are commercially available, are competitively priced, and meet buyers' quality standards.

Refer to EPA's *Construction Products Containing Recovered Materials* for a list of sources of the designated items.

## Laying the Foundation—Cement and Concrete

Your agency might be replacing the concrete walkways leading to your main entrance. Or, maybe you serve on a committee awarding contracts for the construction of a new highway or airport runway. In any case, most large construction projects use vast amounts of concrete. Your agency should require contractors to mix concrete containing the highest practicable amount of coal fly ash or GGBF slag, which are readily available in many states for use as ingredients in cement or concrete.

The level of coal fly ash in concrete typically ranges from 15 to 35 percent of total cementitious material, but may reach 70 percent in massive walls, girders, road bases, and dams. The level of GGBF slag usually ranges from 25 to 50 percent. In most cases, concrete mixed with recovered coal fly ash or slag improves the workability and ultimate strength of the concrete, and helps reduce permeability and sulfate attack. It also may cost less than concrete mixed with only portland cement. Concrete mixtures using GGBF slag have been tested and approved for roadway construction in 15 states and the District of Columbia.

### CASE STUDY: Army Corps of Engineers

The engineers at the Army Corps of Engineers are no strangers to mixing cement and concrete using recovered materials. Their contracts have specified the use of coal fly ash in concrete for more than 20 years and, more recently, have required the use of GGBF slag in concrete mixes for buildings and roads. While pleased with the overall performance of both recovered materials, the engineers say they particularly like the **improved workability** that coal fly ash provides over concrete mixed with portland cement. For more information, contact Greg Hughes of the Army Corps of Engineers at 202 761-4140.

## EPA's Recommended Content Levels for Construction Products

| Product | Material | Percentage of Postconsumer Materials | Percentage of Total Recovered Materials |
|---|---|---|---|
| Structural Fiberboard | Recovered Materials | - | 80 - 100 |
| Laminated Paperboard | Postconsumer Paper | 100 | 100 |
| Rock Wool Insulation | Slag | - | 75 |
| Fiberglass Insulation | Glass Cullet | - | 20 - 25 |
| Cellulose Insulation (loose-fill and spray-on) | Postconsumer Paper | 75 | 75 |
| Perlite Composite Board Insulation | Postconsumer Paper | 23 | 23 |
| Plastic Rigid Foam, Polyisocyanurate/ Polyurethane: Rigid Foam Insulation | Recovered Material | - | 9 |
| Foam-in-Place Insulation | Recovered Material | - | 5 |
| Glass Fiber Reinforced Insulation | Recovered Material | - | 6 |
| Phenolic Rigid Foam Insulation | Recovered Material | - | 5 |
| Floor Tiles (heavy duty/commercial use) | Rubber<br>Plastic | 90 - 100<br>- | -<br>90 - 100 |
| Patio Blocks | Rubber or Rubber Blends<br>Plastic or Plastic Blends | 90 - 100<br>- | -<br>90 - 100 |
| Polyester Carpet Fiber Face | Polyethylene terephthalate (PET) Resin | 25 - 100 | 25 - 100 |
| Latex Paint:<br>– Consolidated[1]<br>– Reprocessed[2]<br>- White, Off-White, Pastel Colors<br>- Grey, Brown, Earthtones, and Other Dark Colors | <br>Recovered Material<br><br>Recovered Material<br>Recovered Material | <br>100<br><br>20<br>50 - 99 | <br>100<br><br>20<br>50 - 99 |
| Shower and Restroom Dividers/Partitions: | <br>Plastic<br>Steel | <br>20 - 100<br>16 | <br>20 - 100<br>20 - 30 |

[1] Consolidated latex paint used for covering graffiti, where color and consistency of performance are not primary concerns.

[2] Reprocessed latex paint used for interior and exterior architectural applications such as wallboard, ceilings, and trim; gutterboards; and concrete, stucco, masonry, wood, and metal surfaces.

## How Do I Purchase Recycled-Content Construction Products? (Continued)

| Specifications for Cement and Concrete Containing Recovered Materials | |
|---|---|
| **Cement Specifications** | **Concrete Specifications** |
| • ASTM[1] C 595, "Standard Specification for Blended Hydraulic Cements." | • ASTM C 618, "Standard Specification for Fly Ash and Raw or Calcined Natural Pozzolan for Use as a Mineral Admixture in Portland Cement Concrete." |
| | • ASTM C 311, "Standard Methods of Sampling and Testing Fly Ash and Natural Pozzolans for Use as a Mineral Admixture in Portland Cement Concrete." |
| • ASTM C 150, "Standard Specification for Portland Cement." | • ASTM C 989, "Ground Granulated Blast-Furnace Slag for Use in Concrete Mortars." |
| | • AASHTO M 302, "Ground Granulated Blast Furnace Slag for Use in Concrete and Mortars." |
| • AASHTO[2] M 240, "Blended Hydraulic Cements." | • American Concrete Institute Standard Practice ACI 226.R1, "Ground Granulated Blast-Furnace Slag as a Cementitious Constituent in Concrete." |

[1] ASTM = American Society for Testing and Materials.

[2] AASHTO = The American Association of State Highway and Transportation Officials.

## Putting Up Walls—Structural Fiberboard and Laminated Paperboard

With the foundation set and major structural components in place, your contractors then begin installing walls, ceilings, and roofing. Or perhaps you've gutted your office building for renovation and are building new walls and ceilings to make more efficient use of the space. Whatever the case, when contractors use any construction products made from fiberboard or laminated paperboard, you should require them to purchase products made from recovered wood and paper fibers.

Although you may think of them as insulation products, contractors also use fiberboard and laminated paperboard in structural applications. You may recognize these products by some of their other names: building board, sheathing, and sound-deadening board, to name just a few. Because federal agencies buy a great deal of fiberboard and laminated paperboard, purchasing them with recovered material content greatly increases the recycling of wood and paper waste.

### Common Fiberboard and Laminated Paperboard Products:

- Building board
- Insulating formboard
- Insulation board
- Sheathing
- Shingle backer
- Sound-deadening board
- Roof insulating board
- Insulating wallboard
- Acoustical and non-acoustical lay in panels
- Floor underlayments
- Roof overlay (coverboard)

## Building In Climate Control—Insulation Products

Naturally, after the walls and ceilings are built, you want to insulate your building to make it as energy-efficient as possible. Insulation made from recovered materials is available for many applications, including spraying foam or cellulose insulation into new and existing walls and installing rolls of fiberglass insulation in new walls or ceilings. Types of recycled-content insulation include those made from recovered glass, slag, paper fiber, and plastics. One manufacturer grinds postconsumer glass bottles into a substitute for the sand used in glass fibers. Others use slag for rock wool or old newspaper for cellulose insulation. So, when directing building or renovation projects, ask contractors to purchase the appropriate insulation made with the highest practicable level of recovered materials.

## Insulation Myths

Whether choosing insulation for renovation or initial construction, do not be influenced by some popular misconceptions about insulation made with recovered materials.

### *Cellulose Insulation*

***Myth:*** **Cellulose insulation made from postconsumer paper is a fire hazard.**

*Fact:* All cellulose insulation, including that made from postconsumer materials, must meet the flammability standards set by the Consumer Products Safety Commission. Due to its density, cellulose insulation keeps oxygen (the fuel of fire) away from structural building components, making them fire resistant.

### *Fiberglass Insulation*

*Myth:* **Fiberglass insulation made with recovered glass is less effective than that made with virgin materials.**

*Fact:* Properly processed recycled-content fiberglass insulation offers the same "R" value (thermal protection) as insulation made entirely from virgin stock.

## Finishing Touches—Carpeting, Floor Tiles, Patio Blocks, Latex Paint, and Shower and Restroom Dividers/Partitions

Flooring, shower and restroom dividers/partitions, and paint are some of the last items to go into a new building. Recycled fiber polyester carpet is manufactured from recycled soda bottles. It typically wears better than carpets made with virgin polyester because the standards for food grade plastics are more rigorous than those for virgin carpet fiber plastics.

You should specify resilient floor tiles made from recycled rubber or recovered plastic when surfacing floors in areas where grease, tar, snow, ice, moisture, or similar substances are likely to be present (e.g., raised, open-web tiles for drainage in school kitchen flooring). You can purchase floor tiles containing up to 100 percent postconsumer rubber made mostly from high-grade truck and airline tires.

Patio blocks made from recovered rubber and plastic are used in garden walkways and trails. Patio blocks containing 90 to 100 percent postconsumer rubber, plastic, or rubber or plastic blends have been proven to work well.

Reprocessed and consolidated latex paints, which are comprised of up to 100 percent recovered material, can be used for many interior and exterior architectural applications. Reprocessed paint is suitable for both interior and exterior applications, while consolidated paint is typically used for exterior applications and as undercoat. These paints have been demonstrated to perform as well as virgin paint.

### CASE STUDY: Naval Security Group

In 1993 when President Clinton issued Executive Order 12873 on federal purchasing of recycled products, the purchasing department of the Naval Security Group (NSG) in Chesapeake, Virginia, enthusiastically accepted his challenge. When they needed carpet, the NSG conducted research to see whether recycled-content carpet could meet their performance needs. They visited a church that had installed polyester carpet made from recycled soda bottles 3 years earlier. Officials were so impressed by what they saw that they now buy all their carpets with 100 percent postconsumer plastic. They are satisfied with the carpets' performance in hallways, officers' quarters, and office spaces. For more information, contact Diane Broadway of NSG at 804 421-8000.

Shower and restroom dividers/partitions are made of 20 to 100 percent recovered plastic or steel. They are used to separate individual shower, toilet, and urinal compartments in commercial and institutional facilities. The recycled content dividers/partitions require less maintenance and are long-lasting.

## CASE STUDY: King County, Washington

In the spring of 1997, King County, Washington, hit a home run by using 100 percent reprocessed latex paint in the administrative offices of the Kingdome, home of the Seattle Mariners. Averaging $7.50 per gallon, the reprocessed paint was not only less expensive than its virgin counterpart, but it covered just as well, according to stadium administration.

In addition, the King County Solid Waste Division continues to test new reprocessed latex paints for use at county parks and municipal buildings. In the past few years, the county has used between 100 and 150 gallons of reprocessed latex paint, primarily in remodeling efforts in the county. The county also works to ensure recovery of all unused paint through a well-established household hazardous waste collection program and industrial materials exchange, diverting usable paints and paint products to citizens, schools, and businesses that can reuse the materials. For more information, contact Karen Hamilton of King County at 206 296-4317.

## CASE STUDY: High Cliff State Park, Menasha, Wisconsin

High Cliff State Park in Menasha, Wisconsin, has used recovered content plastic dividers in all its restroom facilities for 4 years. Although the initial cost of the dividers was higher than those used in the past, the park saved money in reduced maintenance and repair costs. Park officials are extremely pleased with the quality and performance of the product, having experienced no rusting, corrosion, repainting, or graffiti problems since installing the new dividers. For more information, contact Fran Dietzan of the Wisconsin Department of Natural Resources at 920 989-1404.

## CASE STUDY: U.S. General Services Administration

As the major supplier of reprocessed paint to government agencies, the U.S. General Services Administration's (GSA's) Paint and Chemical Commodity Center takes its environmental commitment seriously. In 1996, the agency painted its regional administrator's office in Seattle, Washington, with the recovered paint it sells. The recovered paint reportedly has provided excellent coverage and durability. The agency will build on the success of this project by painting a number of other GSA offices and facilities with recovered content latex paint during 1997. For more information, contact Janice Douglas of GSA at 206 931-7081.

# How Can I Get More Information?


## Information Available From EPA

This fact sheet and the following publications on buying recycled products are available in electronic format on the Internet at http://www.epa.gov/epaoswer/non-hw/procure.htm. Use Internet e-mail to order paper copies of documents. Include the requestor's name and mailing address on all orders. Address e-mail to: rcra-docket@epamail.epa.gov. Text of the following *Federal Register* notices can be found at http://www.epa.gov/fedrgstr/search.htm. Search by specific day, by keywords, or by accessing the Government Printing Office database.

Paper copies also may be ordered by calling the RCRA Hotline. Callers within the Washington Metropolitan Area must dial 703 412-9810 or TDD 703 412-3323 (hearing impaired). Long-distance callers may call 800 424-9346 or TDD 800 553-7672. The RCRA Hotline operates weekdays, from 9:00 a.m. to 6:00 p.m., EST.

- *Federal Register (FR)* notices promulgating CPG I (60 FR 21370/EPA530-Z-95-006), May 1, 1995, and RMAN I (60 FR 21386/EPA530-Z-95-007), May 1, 1995. *Federal Register* notices promulgating CPG II (62 FR 60961/EPA530-Z-97-009) and RMAN II (62 FR 60975/EPA530-Z-97-010), November 13, 1997.
- *EPA Issues Comprehensive Procurement Guideline* (EPA530-F-95-010). This 4-page fact sheet provides general information about the CPG and the development of affirmative procurement programs.
- *Environmental Fact Sheet—EPA Guideline for Purchasing Cement and Concrete Containing Fly Ash* (EPA530-SW-91-086). This 2-page fact sheet provides general information about concrete mixed with coal fly ash.
- *Construction Products Containing Recovered Materials* (EPA530-B-97-014). This list identifies sources of construction products containing recovered materials.
- *A Study of State and Local Government Procurement Practices that Consider Environmental Performance of Goods and Services* (EPA742-R-96-007). This report provides important program elements and case studies of state and county agencies purchasing environmentally preferable products and services. For a copy of the report or more information on EPA's Environmentally Preferable Purchasing (EPP) program, contact the Pollution Prevention Information Clearinghouse at 401 M Street, SW. (7409), Washington, DC 20460. Phone: 202 260-1023. Fax: 202 260-4659. Visit the EPP homepage at http://www.epa.gov/opptintr/p2home.

## Other Sources of Information

- The American Association of State Highway and Transportation Officials (AASHTO). AASHTO publishes concrete and cement-mixing specifications, which are listed in this fact sheet and in RMAN I. Contact: AASHTO, 444 North Capitol Street, NW., Suite 249, Washington, DC 20001. Phone: 202 624-5800. Fax: 202 624-5806. The Publications Sales Office's mailing address is P.O. Box 96716, Washington, DC 20090-6716. Phone: 888 227-4860. Fax: 800 525-5562.
- American Concrete Institute (ACI). ACI publishes a standard for concrete containing GGBF slag and offers several relevant publications. Contact: ACI, P.O. Box 9094, Farmington Hills, MI 48333. Phone: 248 848-3700.
- American Society for Testing and Materials (ASTM). ASTM publishes standards for mixing cement and concrete. Contact: ASTM, 100 Barr Harbor Drive, West Conshohocken, PA 19428-2959. Phone: 610 832-9585. Fax: 610 832-9555. Homepage: http://www.astm.org.
- Buy Recycled Business Alliance. The Alliance includes over 3,200 companies and organizations committed to increasing their use of recycled-content products and materials in their day-to-day operations. The Alliance offers educational materials, a quarterly newsletter, and product-specific guides. Publications include factsheets on insulation and coal fly ash, and *Building for Tomorrow: Buy Recycled Guidebook for the Commercial Construction Industry*. Public purchasing entities can join free of charge. For more information, contact Bonnie Fedchock, National Recycling Coalition, 1727 King Street, Suite 105, Alexandria, VA 22314-2720. Phone: 703 683-9025, Ext. 209. Fax: 703 683-9026.
- *Directory of Recycled-Content Building and Construction Products*. This regional directory includes 500 construction and building products manufactured partially or totally from recycled materials. Contact: Clean Washington Center, First Interstate Center, 999 Third Avenue, Suite 1060, Seattle, WA 98104. Free to Washington residents, $20 for others. Phone: 206 464-7040. Fax: 206 464-6902. Homepage: http://www.cwc.org.
- *Environmental Building News*. This monthly newsletter on environmentally responsible design and construction includes articles on new products and materials, technologies, and construction methods. Contact: RR 1, Box 161, Brattleboro, VT 05301. Phone: 802 257-7300. Fax: 802 257-7304. Homepage: http://www.ebuild.com.

- *Environmental Resource Guide*. Published by the American Institute of Architects (AIA), this 1,100-page guide presents comprehensive lifecycle information on building materials and applications, including products and recyclability. Contact AIA at 1735 New York Avenue, NW., Washington, DC 20006-5292. Phone: 800 225-5945. Price: $195 ($175 for members). Homepage: http://www.aia.org.
- Federal Highway Administration (FHWA). With assistance from the American Coal Ash Association, Inc., FHWA published *Fly Ash Facts for Highway Engineers* (FHWA-SA-94-081), August 1995. It also maintains a database of state specifications for using coal fly ash and GGBF slag. Contact: Gary Craword, Federal Highway Administration, 400 Seventh Street, SW., Washington, DC 20590. Phone: 202 366-1286.
- General Services Administration (GSA). GSA's *Environmental Products Guide* catalogs environmentally preferable products and services available through the Federal Supply Service. Copies of *Carpet, Carpet Tiles, and Carpet Cushion, Multiple Award Schedule FSS72-I-A* are also available. Contact GSA, Centralized Mailing List Service (7CAFL), 4900 Hemphill Street, P.O. Box 6477, Fort Worth, TX 76115-9939. Phone: 817 334-5215. Fax: 817 334-5227. GSA also offers recycled content paint through requisition and processing. For more information on how to purchase this product, contact the GSA Paint and Chemical Commodity Center at 800 241-7246. You can also access *GSA Advantage!*, GSA's Internet-based online ordering system, to order any GSA product at https://www.fss.gsa.gov/cgi-bins/advwel.
- *Greening the Government: A Guide to Implementing Executive Order 12873*. This publication explains how Executive Order 12873 changes federal purchasing. It includes case studies and resources for purchasing a variety of products containing recovered materials. Updated in the summer of 1997, it is available from the Office of the Federal Environmental Executive, 401 M Street, SW. (Mail Code 1600), Washington, DC 20460. Phone: 202 260-1297. Fax: 202 401-9503. Homepage: http://www.ofee.gov.
- *Guide to Recycled Products: Building and Construction*. This guide is published by Metro, a regional government agency serving the Portland, Oregon, area, but may be useful for procurement officials in other areas of the country. It is designed to help locate hundreds of recycled-content building products. Contact: Metro, 600 NE. Grand Avenue, Portland, OR 97232. Phone: 503 234-3000. Fax: 503 797-1795.
- *A Guide to Resource Efficient Building Elements*. In addition to tips on efficient design and job-site recycling, this guide lists several manufacturers that make products using recovered materials. Contact: Center for Resourceful Building Technology, P.O. Box 100, Missoula, MT 59806. Phone: 406 549-7678. Fax: 406 549-4100.
- *The Harris Directory of Recycling and Pollution Preventing Materials for Home, Office, and Garden*. This computer database for MacIntosh and Windows lists construction products made with recovered materials. Users can search for topics using either a key word search or by consulting an accompanying 24-page handbook. Contact B.J. Harris, 522 Acequia Madre, Santa Fe, NM 87501. Phone: 505 995-0337. Fax: 505 920-1180.
- National Institute of Governmental Purchasing (NIGP). NIGP maintains a library of product specifications and sample bid documents for both virgin- and recycled-content products, including concrete. It also offers procurement training workshops for members. For more information, contact Fuad Abu-Taleb, 11800 Sunrise Valley Drive, Reston, VA 22091. Phone: 703 715-9400, Ext. 241. Fax: 703 715-9897.
- *Official Recycled Products Guide.* This directory lists more than 5,000 manufacturers and distributors of recycled-content products, including those of structural fiberboard, paperboard, insulation, carpeting, floor tiles, patio blocks, latex paint, and shower and restroom dividers. Contact: Recycling Data Management Corporation, P.O. Box 577, Ogdensburg, NY 13669. Phone: 800 267-0707. Fax: 315 471-3258.
- *Recycled Plastic Products Source Book*. This booklet lists more than 1,300 plastic products from approximately 300 manufacturers, including carpeting, insulation, floor tiles and shower and restroom dividers. For more information, call the American Plastics Council (APC), 1801 K Street, NW., Suite 7010, Washington, DC 20006. Phone: 202 974-5400. Fax: 202 296-7119. Visit the APC homepage at: http://www.plasticsresource.com.
- *Resource Guide to Recycled Construction Products*. This recycled construction products list is available from the Los Angeles Integrated Solid Waste Management Office, 433 South Spring Street, Fifth Floor, Los Angeles, CA. Phone: 213 847-1444.
- U.S. Army Corps of Engineers (USACE). The Corps has specifications for cement containing coal fly ash. Contact Greg Hughes, USACE, 20 Massachusetts Avenue, NW., Washington, DC 20314. Phone: 202 761-4140. Fax: 202 761-4139. Homepage: http://www.usace.army.mil.

## How Can I Get More Information? (Continued)

### Internet Sites

- **Environmental Building News: http://www.ebuild.com/. This site is the online version of *Environmental Building News*, the leading periodical on environmentally sustainable design and construction. It contains articles, reviews, and news stories on energy-efficient, resource-efficient, and healthy building practices.**
- **Green Building Source: http://oikos.com. This site contains a catalog of books, videos, and software for sustainable construction; a searchable database of companies that feature environmentally friendly products; and links to other green building sites.**
- **King County Recycled Product Procurement Program: http://www.metrokc.gov/oppis/recyclea.html. This site describes the tools and techniques developed by King County, Washington, agencies for purchasing recycled products.**
- **The Procurement Assistance Jumpstation: http://www.fedmarket.com/procinet.html. This site contains links to many sites containing procurement information.**
- **Reduce, Reuse, Recycle...Through Procurement: http://www.epa.gov/epaoswer/non-hw/procure.htm. This site describes EPA's effort to facilitate the procurement of products containing recovered materials, including information on CPG, RMANs, and the Buy Recycled Series.**
- **Sustainable Building Sources: http://www.greenbuilder.com/general/buildingsources.html. This site contains green building news articles, conference announcements, links to other green building sites, and the *Sustainable Building Sourcebook*.**

*In addition, contact your state solid waste management agency for information about local and regional businesses that produce or distribute recycled-content products.*

**EPA**

**United States**
**Environmental Protection Agency**
**401 M Street, SW. (5306W)**
**Washington, DC 20460**

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